# 2.54mm Pitch Low Profile Connector

### HIF3FB and HIF3FC Series

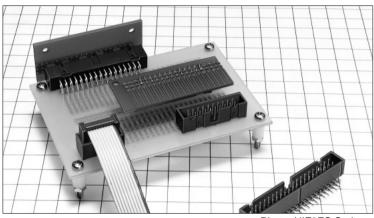


Photo: HIF3FC Series

### **■**Features

#### 1. Flux Prevention

HIF3FC series straight type takes complete flux tight measures.

#### 2. Low Profile

The pin header is a low profile of height 9.2mm. The board to board clearance is 12.2mm for stacking connection.

### **■**Applications

Computers, termination equipment, various kinds of electronic equipment, Office Automation machines and so on

### **■**Product Specifications

| Doting | Current rating: 1A      | Operating Temperature Range: -55 to +85°C (Note 1) | Storage Temperature Range: -10 to +60℃ (Note 2) |
|--------|-------------------------|----------------------------------------------------|-------------------------------------------------|
| Rating | Voltage rating: 200V AC | Operating Humidity Range: 40 to 80%                | Operating Humidity Range: 40 to 70% (Note 2)    |

| Item                             | Specification                                        | Condition                                                                                               |  |  |
|----------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--|--|
| 1. Insulation Resistance         | 1000M ohms                                           | 500V DC                                                                                                 |  |  |
| 2. Withstanding Voltage          | No flashover or insulation breakdown.                | 650V AC/1 minute.                                                                                       |  |  |
| 3. Contact Resistance            | 15m ohms max.                                        | 0.1A                                                                                                    |  |  |
| 4. Vibration                     | No electrical discontinuity of $1\mu s$ or more      | Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.               |  |  |
| 5. Humidity (Steady state)       | Insulation resistance: 1000M ohms min                | 96 hours at temperature of 40°C and humidity of 90% to 95%                                              |  |  |
| 6. Temperature Cycle             | No damage, cracks, or parts looseness.               | (-55°C: 30 minutes→15 to 35°C: 5 minutes max.→<br>85°C: 30 minutes→15 to 35°C: 5 minutes max.) 5 cycles |  |  |
| 7. Durability (Mating/un-mating) | Contact resistance: 15 m ohms max.                   | 500 cycles                                                                                              |  |  |
| 8 Pacietance to Soldering heat   | No deformation of components affecting performance.  | Flow: 260°C for 10 seconds                                                                              |  |  |
| o. Nesistance to soldering heat  | Two deformation of components affecting performance. | Manual soldering: 300°C for 3 seconds                                                                   |  |  |

Note 1: Includes temperature rise caused by current flow.

#### ■Material

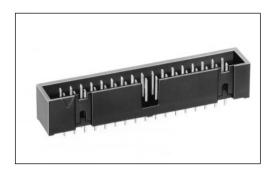
| Parts     |                  | Material     | Finish                 | Remarks |
|-----------|------------------|--------------|------------------------|---------|
| Insulator |                  | PBT          | Black                  | UL94V-0 |
| Contoot   | Pin header Brass |              | Calaatina mald plate d |         |
| Contact   | Receptacle       | Copper alloy | Selective gold plated  |         |

### **■**Ordering Information

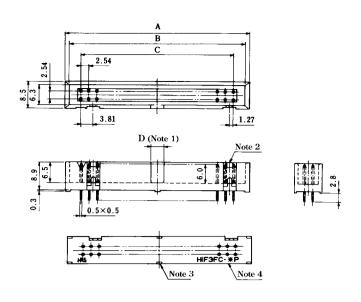
| 1 Sei        | ries Name   | : HIF                                             | A: Selective gold plating |
|--------------|-------------|---------------------------------------------------|---------------------------|
| <b>2</b> Sei | ries No.    | : 3FB (60, 64 contacts)                           | 6 Contact pitch: 2.54mm   |
|              |             | 3FC (10~50 contacts)                              | Contact type              |
| 3 Nur        | mber of con | tacts: 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64 | DSA: Straight type        |
| 4            | Р           | : Pin header                                      | DS : Right angle type     |
|              | D           | : Socket                                          |                           |

Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

## **■**Straight Type Pin Header

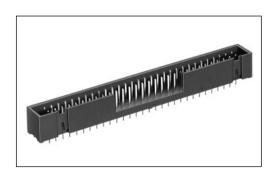


- Note 1: Two types of 50 contacts are available. Please use products according to the table as shown below.
- Note 2: The number of polarizing key mounted positions differs according to products. Please refer to the table as shown below.
- Note 3: The 10 contact type has no standoff at the center.
- Note 4: \* indicates the number of contacts.

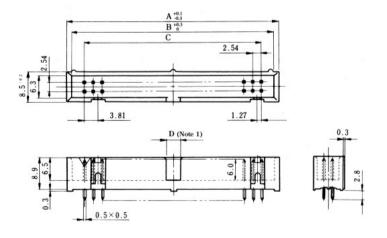


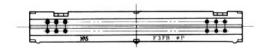
Unit: mm

| Part Number          | CL No.     | Number of Contacts | А     | В     | С     | D (Note 1) | Polarizing Key Mounted Position(Note 2) |
|----------------------|------------|--------------------|-------|-------|-------|------------|-----------------------------------------|
| HIF3FC -10PA-2.54DSA | 616-0161-4 | 10                 | 20.2  | 17.5  | 10.16 | 4.1        | None                                    |
| HIF3FC -14PA-2.54DSA | 616-0162-7 | 14                 | 25.28 | 22.58 | 15.24 | 4.1        | 1 point on the left side                |
| HIF3FC -16PA-2.54DSA | 616-0163-0 | 16                 | 27.82 | 25.12 | 17.78 | 4.1        |                                         |
| HIF3FC -20PA-2.54DSA | 616-0164-2 | 20                 | 32.9  | 30.2  | 22.86 | 4.1        |                                         |
| HIF3FC -26PA-2.54DSA | 616-0165-5 | 26                 | 40.52 | 37.82 | 30.48 | 4.1        |                                         |
| HIF3FC -30PA-2.54DSA | 616-0166-8 | 30                 | 45.6  | 42.9  | 35.56 | 4.1        | 1 point on the right and left           |
| HIF3FC -34PA-2.54DSA | 616-0167-0 | 34                 | 50.68 | 47.98 | 40.64 | 4.1        | sides, respectively                     |
| HIF3FC -40PA-2.54DSA | 616-0168-3 | 40                 | 58.30 | 55.60 | 48.26 | 4.1        |                                         |
| HIF3FC -50PA-2.54DSA | 616-0169-6 | 50                 | 71.0  | 68.3  | 60.96 | 4.1        |                                         |
| HIF3FCA-50PA-2.54DSA | 616-0170-5 | 50                 | 71.0  | 68.3  | 60.96 | 26.96      |                                         |



Note 1: Two types are available. Please use them according to the table as shown below.

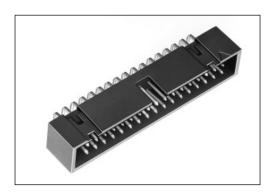




Unit: mm

| Part Number          | CL No.     | Number of Contacts | Α     | В    | С     | D (Note 1) | Polarizing Key Mounted Position |
|----------------------|------------|--------------------|-------|------|-------|------------|---------------------------------|
| HIF3FB -60PA-2.54DSA | 616-0130-0 | 60                 | 83.7  | 81.0 | 73.66 | 4.1        |                                 |
| HIF3FBA-60PA-2.54DSA | 616-0142-0 | 60                 | 83.7  | 81.0 | 73.66 | 26.96      | 1 point on the right and left   |
| HIF3FB -64PA-2.54DSA | 616-0131-3 | 64                 | 88.78 | 86.1 | 78.74 | 4.1        | sides, respectively             |
| HIF3FBA-64PA-2.54DSA | 616-0143-2 | 64                 | 88.78 | 86.1 | 78.74 | 26.96      |                                 |

## **■**Right Angle Type Pin Header

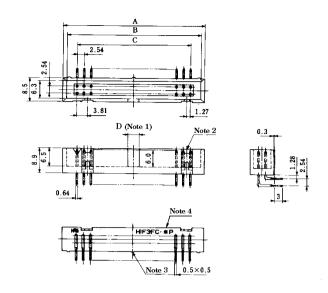


Note 1: Two types of 50 contacts are available. Please use products according to the table as shown below.

Note 2: The number of polarizing key mounted positions differs according to products. Please refer to the table as shown below.

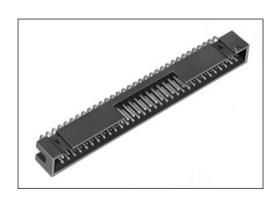
Note 3: The 10 contact type has no standoff at the center.

Note 4: \* indicates the number of contacts.

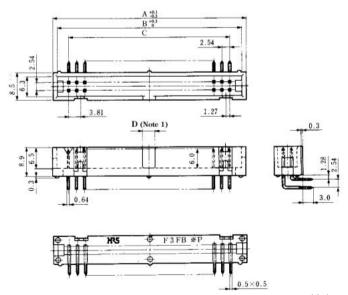


Unit: mm

| Part Number         | CL No.     | Number of Contacts | Α     | В     | С     | D (Note 1) | Polarizing Key Mounted Position(Note 2) |
|---------------------|------------|--------------------|-------|-------|-------|------------|-----------------------------------------|
| HIF3FC -10PA-2.54DS | 616-0061-0 | 10                 | 20.2  | 17.5  | 10.16 | 4.1        | None                                    |
| HIF3FC -14PA-2.54DS | 616-0062-2 | 14                 | 25.28 | 22.58 | 15.24 | 4.1        | 1 point on the left side                |
| HIF3FC -16PA-2.54DS | 616-0063-5 | 16                 | 27.82 | 25.12 | 17.78 | 4.1        |                                         |
| HIF3FC -20PA-2.54DS | 616-0064-8 | 20                 | 32.9  | 30.2  | 22.86 | 4.1        |                                         |
| HIF3FC -26PA-2.54DS | 616-0065-0 | 26                 | 40.52 | 37.82 | 30.48 | 4.1        |                                         |
| HIF3FC -30PA-2.54DS | 616-0066-3 | 30                 | 45.6  | 42.9  | 35.56 | 4.1        | 1 point on the right and left           |
| HIF3FC -34PA-2.54DS | 616-0067-6 | 34                 | 50.68 | 47.98 | 40.64 | 4.1        | sides, respectively                     |
| HIF3FC -40PA-2.54DS | 616-0068-9 | 40                 | 58.30 | 55.60 | 48.26 | 4.1        |                                         |
| HIF3FC -50PA-2.54DS | 616-0069-1 | 50                 | 71.0  | 68.3  | 60.96 | 4.1        |                                         |
| HIF3FCA-50PA-2.54DS | 616-0070-0 | 50                 | 71.0  | 68.3  | 60.96 | 26.96      |                                         |



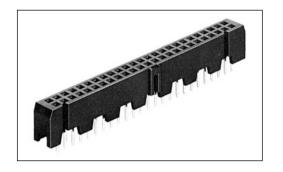
Note 1: Two types are available. Please use them according to the table as shown below.

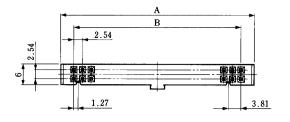


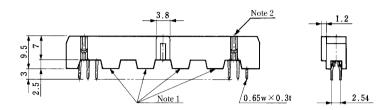
Unit: mm

| Part Number         | CL No.     | Number of Contacts | Α     | В    | С     | D (Note 1) | Polarizing Key Mounted Position |
|---------------------|------------|--------------------|-------|------|-------|------------|---------------------------------|
| HIF3FB -60PA-2.54DS | 616-0030-6 | 60                 | 83.7  | 81.0 | 73.66 | 4.1        |                                 |
| HIF3FBA-60PA-2.54DS | 616-0042-5 | 60                 | 83.7  | 81.0 | 73.66 | 26.96      | 1 point on the right and left   |
| HIF3FB -64PA-2.54DS | 616-0031-9 | 64                 | 88.78 | 86.1 | 78.74 | 4.1        | sides, respectively             |
| HIF3FBA-64PA-2.54DS | 616-0043-8 | 64                 | 88.78 | 86.1 | 78.74 | 26.96      |                                 |

# **■**Straight Type Receptacle









Note 1: Standoff differs according to products.

Unit: mm

| Part Number         | CL No.     | Number of Contacts | Α     | В     | Polarizing Key Mounted Position |
|---------------------|------------|--------------------|-------|-------|---------------------------------|
| HIF3FB-10DA-2.54DSA | 616-0201-7 | 10                 | 17.27 | 10.16 | None                            |
| HIF3FB-16DA-2.54DSA | 616-0203-2 | 16                 | 24.89 | 17.78 |                                 |
| HIF3FB-20DA-2.54DSA | 616-0204-5 | 20                 | 29.97 | 22.86 |                                 |
| HIF3FB-26DA-2.54DSA | 616-0205-8 | 26                 | 37.59 | 30.48 |                                 |
| HIF3FB-30DA-2.54DSA | 616-0206-0 | 30                 | 42.67 | 35.56 | 1 point on the right and left   |
| HIF3FB-34DA-2.54DSA | 616-0207-3 | 34                 | 47.75 | 40.64 | sides, respectively             |
| HIF3FB-40DA-2.54DSA | 616-0208-6 | 40                 | 55.37 | 48.26 |                                 |
| HIF3FB-50DA-2.54DSA | 616-0209-9 | 50                 | 68.07 | 60.96 |                                 |
| HIF3FB-60DA-2.54DSA | 616-0210-8 | 60                 | 80.77 | 73.66 |                                 |

Note 1: Standoff number differs according to products.

Note 2: The polarizing key number differs according to products.